



**US Army Corps
of Engineers** ®
Portland District

TAG Meeting Minutes

Date: 20 March 2020, 1:00 to 2:00 pm, Teleconference
Project: Bradford Island
Subject: Technical Advisory Group Meeting Minutes
Prepared By: USACE

AGENCY	ATTENDEES
USACE	Chris Budai, Dan Carlson, Kristen Kerns, Bill Gardiner, Katie Richwine, Craig Johnson, Jeff Matson,
Oregon Dept. of Environmental Quality (DEQ)	Bob Schwarz, Heidi Nelson, Mike Poulsen, Jennifer Peterson
Yakama Nation Fisheries (YNF)	Laura Shira
WA Department of Ecology	Rebecca Lawson
Bonneville Power Admin. (BPA)	(not represented)
US Fish and Wildlife Service (USFWS)	Jeremy Buck
Nez Perce	Marissa Merker
Oregon Health Authority	Todd Hudson
USEPA	Sean Sheldrake, Ken Marcy

1) Stormwater update

- The 4th and final stormwater sampling event was completed on 3/13/2020. Samples are confirmed to be at the lab. As of now, there has not been a report from the lab as to if they will be halting operations because of the COVID-19 virus.
- Sampling events #2 and #3 under data validation. Sample event #1 has been validated and sent to TAG already.
- Straw waddles were installed around the catch basins after this 4th stormwater collection event.

2) Discussion of data analysis methods for passive sampling data

- Kristen Kerns provided a review of the main points and general approach for data analysis that were discussed on the 3/12/2020 call that was held for all TAG members that could attend (see "PE statistical approach" notes, attached to TAG agenda email on 3/20/2020). The focus of the call today is to continue that discussion.
 - Statistical and geospatial methods will be used to evaluate source areas for both individual stations and smaller groups of stations.
 - Based on the earlier discussion and discussions with USACE geospatial and geology staff, USACE plans to use both statistical and geospatial tools to explore the data. Data will first be evaluated using standard statistical methods and evaluations of the data distributions. This will help determine how best to weight the data and will inform the geospatial approach.

- The temperature data will potentially help inform if groundwater upwelling is affecting the PCB concentrations on the PE. The temperature data was collected via temperature sensors attached onto wiring adjacent to the PE, recording temperature every hour during deployment.
 - There will be more temperature data than analytical data from the PEs because while there was approximately 85% recovery of the PEs from the passive sampler wire cages there was close to full recovery of the temperature sensors.
- Sean Sheldrake suggested that PRCs could also be used as a line of evidence to look for groundwater influence. Texas Tech has put PRC PCB congeners in the PE's which can be looked at to see if PRC washout will pair with apparent groundwater upwelling from any differences in groundwater temperature.
- Laura Shira has not had a chance to review the summary of the 3/12/2020 call on data analysis and will reach out with any comments.
- Jennifer agreed with the need to look at the data before deciding on methods, but she emphasized the language in the final QAPP still specifies potential analyses for identifying source areas, including comparing porewater concentrations to a NAPL source-area concentration. Jennifer noted that there isn't a positive control for the NAPL source material, making a comparison to any kind of PCB porewater threshold difficult.
 - USACE and EPA acknowledged and agreed with those points. The QAPP was written prior to some of the recent statistical discussions and was meant to be a starting point for developing a statistical approach. Kristen Kerns – There are a few statistical strategies to employ. The pore water value in the QAPP is a total PCB concentration for all congeners, not for the subset that will be analyzed for this project.
 - A full data package in excel will be obtained from Texas Tech and passed on to the TAG.
- Texas Tech is a state university and the labs are now closed due to COVID-19. The samples have been fully extracted and they will sit there until personnel are able to get back into the lab. The raw data would have been available around early May without the lab shutting down (3-month window).
- Mike Poulson asked if the PE sheets that were not retrieved might still be retrievable. The PE sheets that detached from the wire bags are lost somewhere in the forebay. They are not weighted by the wire bags anymore so they are most likely swept away and not recoverable.

3) Stations proposed for full congener analysis

- There are ten samplers that Texas Tech will complete a full congener analysis on. The thought was to pick samplers in potential source areas and potentially catch any unusual congeners. The initial list of samplers chosen by USACE for full congener analysis are as follows:
 - 1 (outfalls)
 - 7 (outfalls)
 - 14 (outfalls)
 - 21 (outfalls)
 - 42 (bulb slope)
 - 43 (bulb slope)
 - 95 (landfill debris pile)
 - 102 (landfill debris pile)
 - 117 (eastern tip)
 - 118 (eastern tip)

- Jennifer generally agrees with this approach. Wonders how to deal with distance from the shore; would it be beneficial to analyze some offshore samplers in addition to near shore samplers? This way to see a potential nearshore to offshore relationship.
 - USACE – the thought was to overlap with the previous debris piles nearshore for the greatest chance of identifying source areas. The samplers currently listed for full congener consideration are within the closest row of samplers, nearest to the shore.
 - Jennifer thinks it might be useful to analyze offshore samplers off of the east tip for full congener analysis.
 - USACE suggests that maybe two of the four outfall locations currently listed for full congener analysis could be replaced with two offshore locations for full congener analysis.
 - Laura wonders if it's possible to add 2 additional samples for full congener analysis.
 - USACE – We are under contract for only 10 samples to be analyzed for full congener analysis; additional samples for full congener analysis would require additional funding and contract modification. The samples and data will remain at the lab and additional samples can be reanalyzed at a later date for full congener analysis if there is further interest to do so after seeing the first round of results.
 - USACE is open to replacing some locations with different locations for full congener analysis if the TAG would like to identify locations and provide reasoning. USACE asks for TAG members to send any comments for revisions to the current approach and locations for full congener analysis within the next two weeks.
- The goal of this sampling event was to both identify potential source areas and eliminate areas from further consideration. Part of the sampling strategy was to identify data gaps within the current CSM.

4) Other items

- Contractors are on-site this week collecting data for cultural resources and geotechnical investigations in the upland. A report on the work done can be sent out once available.
- Next TAG call: a call may not be needed in April if there's no new information to discuss. Data validation of the stormwater samples might not be available at that time due to delays caused by COVID-19. USACE will send an email within a month with a recommendation as to if it's worthwhile to have a TAG call in April.